

Monday, May 20, 2019

Attn: Ms. Jennifer Atkins AECOM 250 Apollo Drive Chelmsford, MA 01824

Project ID: GULF CHELSEA TERMINAL 60597375-0500

SDG ID: GCD06920 Sample ID#s: CD06920

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301 CT Lab Registration #PH-0618 MA Lab Registration #M-CT007 ME Lab Registration #CT-007 NH Lab Registration #213693-A,B NJ Lab Registration #CT-003 NY Lab Registration #11301 PA Lab Registration #68-03530 RI Lab Registration #63 UT Lab Registration #CT00007 VT Lab Registration #VT11301



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

May 20, 2019

SDG I.D.: GCD06920

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client Id	Lab Id	Matrix
OUTFALL 003	CD06920	SURFACE WATER



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Analysis Report

May 20, 2019

FOR: Attn: Ms. Jennifer Atkins

AECOM

250 Apollo Drive

Chelmsford, MA 01824

Sample InformationCustody InformationDateTimeMatrix:SURFACE WATERCollected by:05/02/1913:45Location Code:AECOME-GULFReceived by:LB05/03/1916:00

Rush Request: Standard Analyzed by: see "By" below

P.O.#: Laboratory Data

SDG ID: GCD06920 Phoenix ID: CD06920

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client ID: OUTFALL 003

		RL/					
Parameter	Result	PQL	Units	Dilution	Date/Time	Ву	Reference
Oil and Grease by EPA 1664A	< 1.4	1.4	mg/L	1	05/06/19	MSF	E1664A
pH	7.95	1.00	pH Units	1	05/04/19 00:07	RR/EG	SM4500-H B-11
Total Suspended Solids	35	5.0	mg/L	1	05/07/19	EG	SM2540D-11
Semi-Volatile Extraction	Completed				05/03/19	S/D	SW3520C
Aromatic Volatiles w/N	<u>apthalene</u>						
Benzene	ND	1.0	ug/L	1	05/03/19	МН	E624.1
Naphthalene	ND	1.0	ug/L	1	05/03/19	MH	E624.1
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	1	05/03/19	MH	70 - 130 %
% Bromofluorobenzene	93		%	1	05/03/19	MH	70 - 130 %
% Dibromofluoromethane	100		%	1	05/03/19	MH	70 - 130 %
% Toluene-d8	101		%	1	05/03/19	MH	70 - 130 %
Semivolatiles by SIM, F	PAH						
Benzo(a)pyrene	ND	0.10	ug/L	1	05/07/19	PS	E625.1
Naphthalene	ND	0.51	ug/L	1	05/07/19	PS	E625.1
QA/QC Surrogates							
% 2-Fluorobiphenyl	67		%	1	05/07/19	PS	30 - 130 %
% Nitrobenzene-d5	65		%	1	05/07/19	PS	30 - 130 %
% Terphenyl-d14	38		%	1	05/07/19	PS	30 - 130 %

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client ID: OUTFALL 003

RL/

Parameter Result PQL Units Dilution Date/Time By Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time

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Phyllis Shiller, Laboratory Director

May 20, 2019

Reviewed and Released by: Rashmi Makol, Project Manager

Phoenix I.D.: CD06920



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QA/QC Report

May 20, 2019

QA/QC Data

SDG I.D.: GCD06920

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 477653 (mg/L), QC Sample No: CD05994 (CD06920)														
Oil and Grease by EPA 1664A	BRL	1.4	<1.4	<1.4	NC	96.0			90.0			85 - 115	20	
Comment:														
Additional: MS acceptance range	75-125%	· .												
QA/QC Batch 477817 (mg/L), Q	C Samp	le No:	CD06830	(CD069	20)									
Total Suspended Solids	BRL	5.0	230	230	0	93.0						85 - 115		
QA/QC Batch 477640 (pH), QC	Sample	No: C	D06892 (0	CD06920	0)									
рН			6.31	6.39	1.30	98.5						85 - 115	20	
Comment:														
Additional: LCS acceptance range	is 85-11	5% MS	acceptance	e range	75-125%									



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QA/QC Report

May 20, 2019

QA/QC Data

SDG I.D.: GCD06920

Parameter	Blank	BIK RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 477706 (ug/L)	, QC Samp	le No: CD07238 (CD06920)								
Volatiles - Surface Wat	<u>er</u>									
Benzene	ND	0.70	98	95	3.1	92	95	3.2	65 - 135	20
Naphthalene	ND	1.0	84	84	0.0	95	105	10.0	70 - 130	30
% 1,2-dichlorobenzene-d4	99	%	99	100	1.0	101	99	2.0	70 - 130	30
% Bromofluorobenzene	91	%	108	106	1.9	110	105	4.7	70 - 130	30
% Dibromofluoromethane	96	%	100	104	3.9	105	100	4.9	70 - 130	30
% Toluene-d8	100	%	99	99	0.0	100	100	0.0	70 - 130	30
Comment:										
A blank MS/MSD was analyze	d with this ba	atch.								

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis/Shiller, Laboratory Director

May 26, 2019

Monday, May 20, 2019

Sample Criteria Exceedances Report

Criteria: None
State: MA

GCD06920 - AECOME-GULF

State: MA

RL Analysis
SampNo Acode Phoenix Analyte Criteria Units
Result RL Criteria Units

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

^{***} No Data to Display ***



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Analysis Comments

May 20, 2019 SDG I.D.: GCD06920

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Cooler: Yes No No IPK Yes ICE No OC	2 gaecom.com	112185	This section MUST be	completed with	Bottle Quantities.	•	higooi toss	Hoos Thou	THOS.	Mos ellere Mos ellere Schoen							<u>Data Format</u>	Exce	☐ GIS/Key	□ Eouls	Data Package	☐ Tier II Checklist ☐ Full Data Package*	☐ Phoenix Std Report ☐ Other	* SURCHARGE APPLIES
Coolant: IPK (Pes P ICE Temps) ((Pc Pg of Data Delivery/Contact Options:	Phone: 1-978-905-2112 Email: jennifer.atkins@aecom.com	Project P.O.	This	8	Bot		OS:		\\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SON IN C	7 2						MA The Confidence of the Confi		- 2- - 6- 				U MWRA eSMART	cted: MA
06040		597375-0500							TO COLINA TO	8 18 10 10 10 10 10 10 10 10 10 10 10 10 10							OIL	RCP Cert	SW Profection	GA Mobility	GB Mobility	Residential DEC	Other	State where samples were collected:
DY RECORD 370, Manchester, CT	Fax (860) 645-0823 0) 645-8726	Project: Gulf Chelsea Terminal / 60597375-0500	ifer Atkins	OM	119RM				THE OWN	CCOMO STA							2	(Residential)	GW	Other				State where
CHAIN OF CUSTODY RECORD 587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040	Email: info@phoenixlabs.com Fax (860) 64: Client Services (860) 645-8726	Project: Gulf Che	Report to: Jennifer Atkins	Invoice to: AECOM	QUOTE # AE012319RM		Analysis	Rednest	THAOR	COMO ST.		(T	52/1/2	31.9 1100		Turnaround:] 1 Day*] 2 Days*] 3 Days*] Standard	☐ Other * SURCHARGE APPLIES
CHA 587 East Middl	Email: info						61-2-5		iste water ipe OIL =Oii	Time	18 / V / V							12,20 1					<u> </u>	□
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	Laboratories,	N	250 Apollo Drive	Chelmsford, MA 01824	Jennifer Atkins	Client Sample - Information - Identification			round water sw =su ent SL =Sludge S =S	Customer Sample	Outfall 003						Accepted by:	V V			ments or Regulation			
HOFWIX	Environmental Laboratories, Inc		Address: 250 Ap	Chelm	Jennife	e troil C	Sampler's	Code:	BM=Dminking water 5w=Ground water 5w=Sunace water www=waste water 5W=Sedment \$L=Sludge \$=Soil \$D=Soil W=Wipe OIL=Oil B=Bulk L=Liquid	PHOENIX USE ONLY SAMPLE #	0						uished by:	2			Comments, Special Requirements or Regulations:			